



A twenty-acre pecan grove on a plantation in Mississippi, showing the sturdy, symmetrical appearance of the trees.

Domesticating the Pecan

By C. E. COLLINS

WHEN you buy that sack of mixed nuts to slip into the kiddie's stocking for a Christmas morning feast, or when you take the sweetest girl in the world a box of candy with pieces studded with bits of nuts, or when you get these bits on a nut sundae at the corner soda fountain, it is nine chances out of ten that you are contributing your bit to domesticate the pecan.

Just as the potato, the tomato, and many other staple articles of food on the table of the average American family were developed into a useful and domestic existence after centuries of wild life, just so is the pecan being rescued from the fast disappearing forest to serve a future and useful purpose to mankind.

To indicate just how fast it is being transplanted from the wild to the domestic grove, it is reliably estimated that 95 per cent of the developed pecan trees in the country today have been set out in the last ten years. Of course there are thousands, perhaps millions of wild trees still standing, but they are undeveloped seedlings scattered through big forests whose only good probably will be when the axman comes along and smilingly chops it down with the inward thought that some hardwood lumber buyer will be fooled into thinking it is hickory instead of pecan.

The pecan is a native of the southern states and, generally speaking, will succeed where cotton can be grown, but it is more common in the immediate lower Mississippi Valley than elsewhere in the United States. It thrives well in the deep rich soil of river valleys, such as the fertile lands bordering the lower Mississippi. However, the last generation of southern farmers has learned that it will grow elsewhere with proper and careful attention. Domesticated pecan groves, consequently, are dotting the landscape where the white-bellied cotton stalk has held sway for many, many years.

Some of the pioneer pecan growers of the southern states have large groves of pecan trees just as northern farmers have orchards of apples and peaches. Most of the groves still are very young and are just beginning to reach maturity in production, and there are hundreds of new groves being set out since the possibilities of immense profit from them have been demonstrated.

Southern farmers are learning some very interesting and, withal, some very profitable lessons from the humble pecan. They are learning now because, before the pecan took up a domesticated existence, little was known of it. In fact there still is a deal of mystery as to how long a pecan tree will live and how long it will bear. Wild pecan trees known to be more than 100 years old seem to keep on growing and bearing rich harvests of nuts from year to year. They will stand more rough usage, such as windstorms and lightning bolts, than most trees; they are very seldom uprooted and have a very dignified and symmetrical appearance.

The demand for domesticated pecan trees has led to the establishment in recent years of pecan nurseries in the southern states. Grafting and budding of trees has greatly improved the stock, just as grafting and budding has brought great improvement in the developed peach over the seedling peach.

After its eighth or tenth year, the pecan tree begins to bear a profitable crop, and it is a poor grove indeed that, when 15 years old, will not yield \$100 clear profit an acre.

In a recent investigation in Mississippi and adjoining states, E. F. White, extension horticulturist representing the United States Department of Agriculture,

and the Mississippi Agricultural and Mechanical College, brought to light some remarkable instances of the huge profits possible from pecan trees, as well as much interesting information from the pioneer growers of domesticated pecans.

He reported that the grove of V. L. Beyer, at Wiggins, Mississippi, produced a profit in one year of \$1,250 per acre. Rev. R. E. Hall, of Hattiesburg, Mississippi, obtained a profit of \$600 per acre; R. W. Bruce, Hermanville, Mississippi, \$500 an acre; I. E. Bass & Sons, Lumberton, Mississippi, \$528 and C. E. Pabst, of Ocean Springs, Mississippi, one of the pioneers in developing the pecan and the originator of Pabst variety, \$460 per acre.

There is a ready market for pecans at from 40 cents to \$1 per pound, depending upon size and quality of nuts. In his investigation, Mr. White found single pecan trees that, had the full crop been marketed at an average price, would have brought their owners an average of more than \$1 a day for each day in the year. J. R. Oliver, of St. Martinville, Louisiana, received nine barrels or 1,350 pounds of nuts from a seedling tree on his property. Judge J. L. Buckley, of Enterprise, Mississippi, reported a yield of 1,200 pounds from a single seedling and other big yields were disclosed.

The budded and grafted trees are much younger than most of the bearing seedlings because budding and grafting is a recent development but some very profitable yields from developed trees were found by Mr. White. A four-year-old tree at Vancleave, Mississippi, produced 60 pounds of nuts; a seven-year-old tree at Lumberton, Mississippi, yielded 149 pounds and a 13-year-old tree at Ocean Springs, Mississippi, produced 185 pounds.

An eight-year-old grove of trees owned by D. C. Bramlette, Jr., of Woodville, Mississippi, produced a profit of \$50 an acre; J. B. Wight, of Cairo, Georgia, had a \$75 profit per acre from a grove also eight years old; the estate of Dunbar Hunt, near Rodney, Mississippi, has a grove of 20 acres of eighteen-year-old trees that in one season produced a net profit of \$2,800.

Following up his investigations, Mr. White said that his findings indicated that pecan trees should be planted in well-prepared, well-drained land. "Cover crops" or companion crops such as peas, beans, peanuts, sweet and Irish potatoes, melons, strawberries, cucumbers, and cotton between the tree rows can be planted and cultivated successfully while the trees are maturing, thus preventing loss of use of the land until the grove is in bearing. Trees should be pruned until 10 years old and sprayed whether bearing or not, and fertilizer and mulch will increase yields in every instance, Mr. White's investigations disclosed. He recommended that trees be planted in "checks" 60 by 60 feet, with even a wider distance between if the soil is rich and deep. In transplanting, it is imperative, he says, that

the roots be kept constantly moist.

One gets an idea of the newness and the "experimental stage" of pecan culture as a commercial industry from Mr. White's report which says, "Very little is known of fertility and sterility of the different varieties of pecans, but the majority believe that they are self-fertile."

Also one is given the impression of a great future in the growing of pecans when Mr. White remarks that "Growers

are unanimous in the belief that the future production of pecan nuts is 'very favorable,' 'unusually bright,' and 'cannot be overdone.'" To their statements might be added the passage in a government bulletin dealing with the pecan. "If pecan culture is pushed with the usual skill and energy of American enterprise, there is every reason to believe that it will not be many years before the pecan will become not only abundant on our markets but also of great importance as an export product."

The pecan harvest starts about the middle of October and usually ends about the middle of December. When the nuts are "ripe" the burr about them opens and they fall to the ground. In the larger commercial orchards or groves, the harvesting is accomplished by using long bamboo poles similar to "fishing poles" for knocking the nuts to the ground. Eventually the trees in the young commercial orchards will be so tall that harvesting will be more difficult, as it is in gathering nuts from the wild seedling trees which often are found towering 150 feet in the air. It is necessary to climb such trees and use the long poles to knock off the nuts, else wait until they fall.

Some of the commercial grove owners have adopted crude methods of polishing the nuts before they market them. One method is to use a barrel partly filled with sand and placed on spindles so that it can be revolved rapidly, the sand polishing the hard surface of the nuts as they are whirled about.

Grading the nuts according to size is another development that is coming into common usage, the larger and more choice nuts bringing a premium when offered for sale. A New Orleans concern which has built up a large business in pecans, uses the common sifter method by which the small nuts drop through holes in a rotating or oscillating bin.

Pecan cracking and picking factories are springing up here and there in the pecan growing region. In these the nuts are cracked and the meats removed. Usually the nuts are soaked in water to prevent injury to the meat during the cracking process, and the meat is more easily removed whole.

There is a large and constantly growing market for the unbroken meats to lovers of nuts, the meats being very delicious as well as nutritious when eaten with salt. Candy-makers and confectioners buy most of the meats, both whole and broken, using the whole meats in the finer candies and the broken bits for nut sundaes, nougats, and so on.

The agricultural experts in the southern states are giving pecan culture a great deal of attention and undoubtedly will give it more as the number of commercial groves increases. They are urging not only the farmers to grow the improved trees but home owners in the villages, towns and cities are being told that the pecan is an ideal lawn tree, because it fills all the requirements for such trees and, moreover, "will pay the tax and insurance on a very nice home" with the nuts it produces.